

From: "Carlin, Jayne" <Carlin.Jayne@epa.gov>  
To: "Amy King" <amy.king@tetrattech.com>  
Date: 7/17/2018 2:38:49 PM  
Subject: Updated FY19 Cost Estimates for EPA R10 Court Driven TMDLs

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Hi Amy,

So sorry to make an urgent request but HQ needs us to submit our cost estimates for FY19 funds ASAP (actually was due on July 13-my fault).

Please update the attached table—with focus on the FY19 column and email to everyone on the “to” and “cc” lines. Miranda and Chris are preparing the technical direction for Deschutes for your review (see attached for the decision). They should email it to you before you return next week.

I will be out of the office between July 18-July 25 but any of you can call me directly at (206) 384-0690.

Thanks!

Jayne Carlin, Watersheds Unit  
US EPA, Region 10  
1200 6th Ave, Suite 155 (OWW-192)  
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## Region 10 TMDL &amp; WQS Work Cost Estimates FY19\*

Project Name	Additional Information	Total Cost for FY18 & FY 19	FY18****	FY19	Comments
Columbia Temperature TMDL	TMDL Modeling	\$110,000	\$110,000		
Klamath Temperature TMDL	TMDL Modeling & TMDL Development (21 Stage 1 waters)	\$142,000	\$142,000		
	Sensitivity Analysis	\$100,000	\$100,000		
	Criteria Development**				
	TMDL Modeling & TMDL Development (3 Stage 2 waters)	212,000			
Willamette Mercury TMDL		\$125,500	\$125,500		
Deschutes TMDL	Areas of TMDLs disapproved only	\$160,000	\$160,000		
Alaska TMDLs	2 TMDLs/annually	\$80,000	\$44,000	\$36,000	
First of Ten Additional OR temperature TMDLs**	TMDL Modeling	\$150,000		\$150,000	
	Sensitivity analysis	\$80,000		\$80,000	
	Criteria Development***				
Rest of Ten OR temperature TMDLs**	TMDL Modeling (9 x \$150k)	\$1,350,000		\$1,350,000	
	Sensitivity Analysis (9 x \$80k)	\$720,000		\$720,000	
	Criteria Development*** (1 x \$400k)				
<b>Total for Contracts</b>		<b>\$3,229,500</b>	<b>\$681,500.00</b>	<b>\$2,336,000.00</b>	
ORISE Participant Support	ORISE Participants on research/technical investigations on TMDLs and CWA 303d/TMDL-related litigation	\$193,085	\$96,640	\$96,445	\$96,445 using FY19 funds for Interagency Agreement between EPA & Dept. of Energy for ORISE participants based on the rate of GS9 Seattle area (with travel & required overhead costs) in Seattle for one participant between October 1, 2017 & December 30, 2018 to provide support in TMDL court orders and settlement agreements.
SEE Records Support	Administrative Record Support for Litigation, TMDLs & 303d List	\$108,000	\$53,000	\$55,000	\$55,000 for FY19. Will fund a 0.8 FTE for a Records Management SEE staff to support all EPA Region 10 TMDL and 303d List records. On average around 30% of her time is spent on litigation related records, 10% on litigation in motion, 10% on establishing additions to the states' 303d lists and 50% on supporting EPA action on state 303d lists & TMDL submittals.
<b>TOTALS</b>		<b>\$3,530,585</b>	<b>\$831,140</b>	<b>\$2,487,445</b>	<b>0</b>

\*\* \$219,000 for criteria development for the Klamath temperature TMDL

\*\*\* \$400,000 Criteria development for Oregon temperature TMDL revisions.

\*\*\*\*Total amount in Tetra Tech contracts (original and follow-on) is \$687,075



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 10**

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OFFICE OF  
WATER AND WATERSHEDS

**JUN 29 2018**

Ms. Heather Bartlett  
Water Quality Program Manager  
Washington Department of Ecology  
PO Box 47600  
Olympia, Washington 98504-7600

Re: Final EPA Action on the *Deschutes River, Percival Creek, and Budd Inlet Tributaries Multi-parameter Total Maximum Daily Load*

Dear Ms. Bartlett:

The U.S. Environmental Protection Agency has completed its Clean Water Act ("CWA") review of the *Deschutes River, Percival Creek, and Budd Inlet Tributaries Multi-parameter Total Maximum Daily Load* ("Deschutes TMDL") that the Washington Department of Ecology ("Ecology") submitted on December 17, 2015. The Deschutes TMDL addresses impairments for temperature, dissolved oxygen ("DO"), pH, fecal coliform bacteria, and fine sediment in segments of several waterbodies, including the Deschutes River and its tributaries, and tributaries to Budd Inlet. The number of impairments and waterbody segments totals 73 unique waterbody-pollutant pairs (i.e., 73 individual TMDLs). The EPA's review also includes Ecology's July 17, 2017, letter to the EPA ("2017 submittal"), which supplemented the 2015 TMDL submittal by providing new calculations for bacteria and clarifications for temperature. The EPA's final action on the TMDL is described in this letter. A summary table of each waterbody-pollutant pair, as well as the EPA's final action on each one, is included in the enclosure.

The EPA is approving 26 of the submitted TMDLs for temperature. These TMDLs meet the statutory and regulatory requirements found in section 303(d) of the CWA and the EPA's implementing regulations at 40 C.F.R. Part 130. The EPA's review indicates that these allocations have been established at levels that, when fully implemented, will lead to the attainment of applicable water quality standards. Therefore, Ecology does not need to include these waters on the next 303(d) list of impaired waters for the applicable parameter.

The EPA finds that 14 of the bacteria TMDLs are established at levels that will attain applicable water quality standards. However, these TMDLs are based in part on new calculations provided in the 2017 submittal, which have not yet undergone public review as required by 40 C.F.R. § 130.7(c)(1)(ii). The EPA is therefore disapproving these bacteria TMDLs because they require additional public review.

The EPA is disapproving 23 additional TMDLs. These include TMDLs developed for temperature, DO, pH, fine sediment, and bacteria. According to our review, these TMDLs fail to meet the statutory and regulatory requirements found in section 303(d) of the CWA and the EPA's implementing regulations. The primary deficiencies are summarized as follows:

- Incomplete TMDL submittals: Some waterbody-pollutant pairs lack critical TMDL components (e.g., loading capacity, wasteload allocations, and load allocations), as required by 40 C.F.R. §§ 130.2 and 130.7.

- Downstream uses not protected: Washington's water quality standards at WAC 173-201A-260(3)(b-d) require that downstream uses be protected. Some waterbody-pollutant pair TMDL calculations allow pollutant loadings that are not protective of downstream waters. Thus, they are not consistent with requirements at 40 C.F.R. § 130.7(c)(1) that TMDLs be established at levels necessary to attain and maintain the applicable water quality standards.
- TMDL target not protective of water quality standards: Some waterbody-pollutant pair TMDL calculations do not provide a clear linkage analysis to demonstrate that the water quality target chosen to develop the loading capacity is protective of state water quality standards. Thus, the EPA is not able to determine whether the TMDLs are consistent with requirements at 40 C.F.R. § 130.7(c)(1) that TMDLs be established at levels necessary to attain and maintain the applicable water quality standards.

Finally, the EPA is not taking action on ten TMDLs submitted for bacteria because they were prepared for ten segments that no longer require bacteria TMDLs. These segments, previously identified as impaired for bacteria on the EPA-approved 2010 303(d) list, were included in the 2015 TMDL submittal. Following Ecology's submission of the Deschutes TMDL in 2015, the EPA approved the delisting of these ten segments based on Ecology's revised Integrated Report. These delistings were included in the EPA's approval of the 2012 303(d) list on July 22, 2016. Placement of the ten segments in Categories 1 and 2 of the Integrated Report indicates they are no longer impaired for bacteria and, thus, no longer require a TMDL. Therefore, the EPA has determined it is not required to approve or disapprove these bacteria TMDLs.

In summary, the EPA is taking the following actions on the Deschutes TMDL:

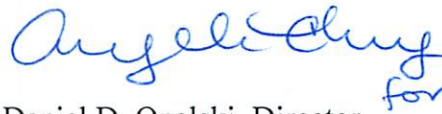
- Approval of 26 TMDLs for temperature.
- Disapproval of 14 TMDLs for bacteria (approvable upon completion of public participation process).
- Disapproval of 23 TMDLs for temperature, DO, pH, fine sediment, and bacteria.

The EPA values our working relationship with Ecology, and we appreciate the continued cooperation offered by the State as we work towards the common goal of addressing impaired waters in the State of Washington. By the EPA's final action, the approved TMDLs are now incorporated into the State's Water Quality Management Plan under section 303(e) of the CWA.

The EPA is committed to completing the work necessary to replace the remaining TMDLs for temperature, DO, pH, fine sediment, and bacteria, which the Agency is disapproving through this action. The replacement TMDLs will require technically complex modeling, and the TMDL development process will involve stakeholder review and input. The EPA intends to complete the revised TMDLs as expeditiously as possible. Additionally, the EPA is aware of a concurrent, high-priority effort to establish a fish hatchery which would likely discharge to the Deschutes River. We plan to work with Ecology to ensure the replacement TMDLs consider the needs of the hatchery, including allocations and timing.

If you have any comments or questions on this Agency action, please feel free to call me at (206) 553-1855, or you have your staff call Miranda Hodgkiss of my staff at (206) 553-0692.

Sincerely,



Daniel D. Opalski, Director  
Office of Water and Watersheds

Enclosure

cc: Mr. Andrew Kolosseus, Ecology (via email)  
Mr. Rich Doenges, Ecology (via email)

## Enclosure: Summary of Final EPA Action on Deschutes TMDL

**Temperature Waterbody-pollutant Pairs**

Waterbody	1996 Listing ID	2010 Listing ID <sup>1</sup>	Final Action
Deschutes River	WA-13-1010	6576	Approve
		7590	Approve
		48710	Approve
		48711	Approve
		48712	Approve
		48713	Approve
		48714	Approve
		48715	Approve
		48717	Approve
		48718	Approve
		9439	Approve
	WA-13-1020	7588	Approve
		7592	Approve
		7593	Approve
		7595	Approve
		48720	Approve
		48721	Approve
		48724	Approve
		48726	Approve
Huckleberry Creek	WA-13-1024	3757	Disapprove
Reichel Creek	WA-13-1022	48666	Disapprove
Tempo Lake Outlet	---	48696	Disapprove
Ayer (Elwanger) Creek	WA-13-1015	(73229)	Disapprove
Unnamed Spring to Deschutes River	---	48923	Disapprove
Black Lake Ditch	---	48733	Approve
		48734	Approve
		48735	Approve
Percival Creek	WA-13-1012	42321	Approve
		48249	Approve
		48727	Approve
		48729	Approve

**pH Waterbody-pollutant Pairs**

Waterbody	1996 Listing ID	2010 Listing ID <sup>1</sup>	Decision
Adams Creek	---	50965	Disapprove
Ayer (Elwanger) Creek	WA-13-1015	5850	Disapprove
Black Lake Ditch	---	50990	Disapprove

**Fine Sediment Waterbody-pollutant Pair**

Waterbody	1996 Listing ID	2010 Listing ID <sup>1</sup>	Decision
Deschutes River	WA-13-1020	6232	Disapprove

<sup>1</sup> Listing IDs correspond to the 2010 303(d) list, except those in parentheses, which are from the 2012 303(d) list.

## Enclosure: Summary of Final EPA Action on Deschutes TMDL

**DO Waterbody-pollutant Pairs**

Waterbody	1996 Listing ID	2010 Listing ID <sup>1</sup>	Decision
Ayer (Elwanger) Creek	WA-13-1015	5851	Disapprove
Deschutes River	WA-13-1010	10894	Disapprove
		47753	Disapprove
		47754	Disapprove
		47756	Disapprove
Lake Lawrence Creek	---	47696	Disapprove
Reichel Creek	WA-13-1022	47714	Disapprove
Black Lake Ditch	---	47761	Disapprove
		47762	Disapprove
Percival Creek	WA-13-1012	48085	Disapprove
		48086	Disapprove

**Bacteria Waterbody-pollutant Pairs**

Waterbody	1996 Listing ID	2010 Listing ID <sup>1</sup>	Decision
Adams Creek	---	45462	Disapprove
		45695	Disapprove
Butler Creek	---	45471	No action
Butler Creek, SW F	---	45342	No action
Ellis Creek	WA-13-0020	45480	Disapprove
Indian Creek	WA-13-1300	3758	Disapprove
		45213	Disapprove
		46410	Disapprove
		(74218)	Disapprove
Mission Creek	WA-13-1380	45212	Disapprove
		46102	Disapprove
Moxlie Creek	WA-13-1350	3759	Disapprove
		3761	Disapprove
		45252	Disapprove
		46432	Disapprove
Schneider Creek	---	45559	Disapprove
Ayer (Elwanger) Creek	WA-13-1015	5849	No action
Chambers Creek	WA-13-1014	45560	No action
Deschutes River	WA-13-1010	46499	No action
		46500	No action
		9881	No action
	WA-13-1020	46210	No action
Reichel Creek	WA-13-1022	3763	Disapprove
		45566	Disapprove
Spurgeon Creek	WA-13-1016	46061	Disapprove
Percival Creek	WA-13-1012	46103	No action
		46108	No action